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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,918	01/11/2005	Christian Hervault	0528-1133	5143
466	7590	09/25/2006		
YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			EXAMINER MOULIS, THOMAS N	
			ART UNIT	PAPER NUMBER
			3747	

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/520,918

**Applicant(s)**

HERVAULT ET AL.

**Examiner**

Thomas N. Moulis

**Art Unit**

3747

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 1/11/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/11/05</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: The specification and drawings are generally confusing and unclear. For example, page 2, lines 27-20 states that figure 2 is schematic and shows a pump—neither of which are true. The invention is not understood. Figure 1 states the item P is a pump, but that also is unclear. It appears the inventive device uses valve 40 and includes pistons 1 and bellows 9—however the operation of such is unclear. Generally, fuel pressure control using computer controlled solenoid valves is well known in the art. Spill valves return fuel to the low pressure area of a fuel system to control fuel pressure. The term “leakage” may be an inaccurate term. Other examples of indefinite language include “drawer (43)” -perhaps “spool” is the proper term of art. Element 48 is referred to as “a piercing”- perhaps words such as “orifice” or thru bore are more precise terms.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 18-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are poorly translated and contain

antecedent problems (e.g. claim 18, lines 6-7 “the computer” and “the motor”, etc) and are indefinite and confusing. Claim 18, line 2 recites “high pressure (HP) gasoline”, then later in the claim “ethylene” is recited. Claim 20 states “a low pressure gas” is supplied by a pump. However, only liquid gasoline appears to be disclosed. It appears the inventive device uses valve 40 and includes pistons 1 and bellows 9—however the operation of such is unclear and the claims do not seem to depict such a device.

4. Other examples of indefinite language include “drawer (43)” in claim 20 perhaps “spool” is the proper term of art. Claim 22 recites “a piercing”- perhaps words such as “orifice” or thru bore are more precise terms.

5.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 18-19, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by DE 195 39 883 A1. The reference discloses an apparatus and a method of controlling the supply of high pressure fuel to a set of fuel injectors in an engine. The system includes a common rail 44, a high pressure pump 12 and an electrically-controlled solenoid valve 30 controlled by ECU 20. The valve is disposed on the low

pressure side of the high pressure pump and spills fuel back towards the low pressure area of the fuel tank to control the pressure and flow of fuel.

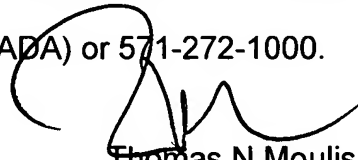
### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See the cited art showing fuel pressure control using spill valves to control fuel pressure within the fuel system in accordance with engine operating parameters.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas N. Moulis whose telephone number is 571 272 4852. The examiner can normally be reached on M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen K. Cronin can be reached on 571 272-4536. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Thomas N Moulis  
Primary Examiner  
Art Unit 3747

tm